| Index       |    | •       |      |
|-------------|----|---------|------|
| Indov       | ~* | , . i ~ | 1000 |
| 111111 10 X |    |         |      |



Application/Control No.

10/658,342 .

GRONVALD ET AL.

Applicant(s)/Patent under Reexamination

Examiner

-Adminior

Art Unit

San-ming Hui

1617

| √  | Rejected |
|----|----------|
| II | Allowed  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| 4 | Appeal   |
|---|----------|
| 0 | Objected |

| Cla  | im                                     | Date      |          |          |          |          |              |  | $\neg$   |          |
|--|--|-----------|----------|----------|----------|----------|--------------|--|--|----------|
| <u> </u>   | ╁                                      | Π         | <u> </u> |          | <u> </u> | Ť        | Γ            | Т  | Н  |          |
| Final  | Original                               | 1/8/07    |          |          |          |          |              |  |  |          |
|  | 1                                      | シ         |          |          |          |          |              |  |  | П        |
|  | 1                                      | f         |          | $\vdash$ | ┢        | $\vdash$ |              | $\vdash$   | -  | Н        |
| _  | 2 3                                    | H         | -        | $\vdash$ | $\vdash$ | ┝        | -            | ┢  | ┢╌   | Н        |
| <u> </u>   | 13                                     | -         | _        | ├        | ⊢        | ┝        | $\vdash$     | ├─   | ├  | Н        |
|  | -                                      | ₩         | -        | ⊢        | ⊢        | ⊢        | ⊢            | -  | ⊢  | Н        |
|  | 4<br>5<br>6                            | Н         | <u> </u> | <u> </u> | ┡        | <u> </u> | <u> </u>     | _  | ┡  | Н        |
|  |  | Щ         | Ш        | <u> </u> | <u> </u> | ╙        |              | _  | ╙  | Ш        |
| ļ  | 7                                      | 1         | _        |          | _        | <u> </u> | <u> </u>     |  | <u> </u>   | Щ        |
|  | 8<br>9                                 | Ц.        |          | _        | <u> </u> | <u> </u> |              |  | L_   | Ш        |
|  |  | Ш         |          | L        | _        | _        | L            | _  |  | Ш        |
|  | 10                                     | Ц         |          | <u> </u> | L        | L        |              |  |  | Ш        |
|  | 11                                     | Ш         |          |          |          |          | L            |  |  |          |
|  | 12                                     | Ш         |          |          |          |          | L            |  | $\Box$   |          |
|  | 13                                     | П         |          |          |          |          | Ĺ            |  |  |          |
|  | 11<br>12<br>13<br>14<br>15<br>16<br>17 | $\prod$   |          |          |          | L        | Ĺ            |  |  |          |
|  | 15                                     | Π         |          |          |          |          |              |  |  |          |
|  | 16                                     |           |          |          |          |          |              |  |  |          |
|  | 17                                     | П         |          |          | Γ        |          |              |  |  | П        |
|  | 18                                     |           |          |          |          |          |              |  |  | П        |
|  | 19                                     |           |          | _        | _        | ┪        | _            |  | Т  | Н        |
| _  | 20                                     |           | Т        | _        | $\vdash$ | $\vdash$ | _            |  | ┢  | Н        |
|  | 19<br>20<br>21                         | -         | -        | ┢        | $\vdash$ |          | $\vdash$     |  | -  | Н        |
| $\vdash$   | 22                                     |           |          | -        | $\vdash$ | $\vdash$ | ┢┈           |  | <del>                                     </del> | Н        |
| $\vdash$   | 22                                     | -         | -        | ┝        | ╁        | -        | $\vdash$     | -  | -  | Н        |
| H  | 24                                     | $\vdash$  | $\vdash$ | _        | ┝        | -        | -            | -  | -  | Н        |
| $\vdash$   | 24<br>25                               | 1         | H        | ⊢        | $\vdash$ | -        | -            | ⊢  | ⊢  | Н        |
|  | 26                                     | H         |          |          |          | -        | _            | -  | ⊢  | Н        |
| <u> </u>   | 20                                     | ₩         | <u> </u> | <u> </u> | <u> </u> |          | -            | -  | ⊢  | Н        |
|  | 27<br>28                               | Н         | _        | _        | _        | <u> </u> |              | <u> </u>   | ┡  | Щ        |
|  | 28                                     | 1         |          | _        | _        | <u> </u> | <u> </u>     | _  | <u> </u>   | Щ        |
|  | 29                                     | Ш         |          | _        | ╙        | _        | _            | _  | _  | Ш        |
|  | 30                                     | Ш         |          |          | _        | <u> </u> | $oxed{oxed}$ | L  | L  | Ш        |
| igwdap   | 31                                     | Ш         | $\Box$   | L_       | <u> </u> | _        |              | L  | <u> </u>   | Ш        |
| $oxed{oxed}$   | 32                                     | Ц         | _        |          |          | L        | L            | <u> </u>   | L  | Ш        |
| $ldsymbol{ld}}}}}}$ | 33                                     | $\coprod$ |          | L.       |          |          |              | $\Box$   |  | Ш        |
|  | 34                                     | ヹ         |          |          |          | Ŀ        |              |  |  | Ш        |
|  | 35                                     |           |          |          |          |          |              |  |  |          |
|  | 36                                     | ۲         |          |          |          |          |              |  |  |          |
|  | 37                                     |           |          |          |          |          |              |  |  |          |
|  | 38                                     |           |          |          |          |          |              |  | Г  |          |
|  | 39                                     |           |          |          |          |          |              |  |  |          |
|  | 40                                     |           |          |          |          |          |              | Г  |  | П        |
|  | 41                                     | Г         |          |          |          |          |              |  |  | П        |
|  | 42                                     |           |          |          | Г        | _        |              |  |  | П        |
|  | 43                                     |           | Т        |          |          | Т        | $\vdash$     |  |  | Н        |
|  | 44                                     |           |          | $\vdash$ | $\vdash$ | _        |              | $\vdash$   | П  | Н        |
| $\vdash$   | 45                                     |           | $\vdash$ |          | $\vdash$ | $\vdash$ |              | <del>                                     </del> | $\vdash$   | Н        |
|  | 46                                     |           | -        |          |          |          |              | -  | $\vdash$   | $\vdash$ |
| $\vdash$   | 47                                     |           | $\vdash$ | _        | -        | $\vdash$ | $\vdash$     | $\vdash$   | Н  | $\vdash$ |
|  | 48                                     | $\vdash$  | H        | —        | $\vdash$ | $\vdash$ | -            | <del></del>                                      | -  | $\vdash$ |
| $\vdash$   | 49                                     | $\vdash$  | H        |          | $\vdash$ |          | $\vdash$     | $\vdash$   | $\vdash$   |          |
|  | 50                                     | -         |          |          | <u> </u> | $\vdash$ | $\vdash$     | <u> </u>   | $\vdash$   | $\vdash$ |
| 1  | 50                                     | 1         | 1        |          |          |          |              |  | ł  | 1        |

| Cla      | Claim          |          |  | Date     |          |          |          |   |   |          |  |  |  |
|----------|----------------|----------|--|----------|----------|----------|----------|---|---|----------|--|--|--|
| Final    | Original       |          |  |          |          |          |          |   | ٠   |          |  |  |  |
| <b>-</b> | 51             |          | ┢  | -        | -        |          |          |   | _   |          |  |  |  |
|          | 52             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 52<br>53       |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 54             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 55             |          |  |          |          |          |          |   |   |          |  |  |  |
| <u> </u> | 56             |          |  |          |          |          |          | <u> </u>  |   | L        |  |  |  |
| ļ        | 57<br>58       | L.       | <u> </u>   | ᆫ        | L        | _        | _        | <u> </u>  | _   | _        |  |  |  |
| <u> </u> | 58             | _        | L  | _        |          |          | _        | _   |   | _        |  |  |  |
| -        | 59             |          | ├  | <u> </u> |          |          |          | -   | <u> </u>  | _        |  |  |  |
| -        | 60<br>61       | _        | ⊢  | ┝        | -        | _        | _        | ⊢   |   | ⊢        |  |  |  |
|          | 62             | ┝        | ⊢  | _        | ┝        | _        | _        | $\vdash$  | _   | _        |  |  |  |
|          | 63             | $\vdash$ | ⊢  | $\vdash$ | $\vdash$ |          | _        | $\vdash$  |   | _        |  |  |  |
|          | 64             |          | ┢  | -        | $\vdash$ |          | -        | $\vdash$  | -   | -        |  |  |  |
|          | 65             |          | ╁  | ┢        | $\vdash$ |          | $\vdash$ | $\vdash$  | -   | H        |  |  |  |
|          | 66             | _        | ┢  | $\vdash$ | -        |          |          | <del>                                     </del>  | _   | _        |  |  |  |
|          | 67             | $\vdash$ | $\vdash$   |          |          |          |          | $\vdash$  | $\overline{}$   |          |  |  |  |
|          | 68             | $\Box$   | $\vdash$   |          |          |          |          |   |   |          |  |  |  |
|          | 69             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 70             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 71             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 72             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 71<br>72<br>73 |          |  |          |          |          |          |   |   |          |  |  |  |
| <u> </u> | 74<br>75       |          |  | _        |          |          |          | <u> </u>  |   | _        |  |  |  |
|          | 75             |          | L  | _        | _        |          | _        | _   |   | _        |  |  |  |
| -        | 76             | _        | <u> </u>   | _        | _        | _        |          |   |   | _        |  |  |  |
| ļ        | 77             | <u> </u> | H  | _        |          |          | -        |   | _   | <u> </u> |  |  |  |
|          | 78<br>79       | -        | -  | -        | -        |          | _        |   |   | _        |  |  |  |
| <u> </u> | 80             | _        | -  | $\vdash$ | -        | _        | _        | $\vdash$  |   | -        |  |  |  |
|          | 81             | <u> </u> | $\vdash$   | _        | H        |          | _        | ┝   | _   | ┝        |  |  |  |
|          | 82             |          | $\vdash$   | _        | $\vdash$ |          | H        | $\vdash$  |   | ┝        |  |  |  |
|          | 82<br>83       |          |  |          | $\vdash$ |          |          | -   |   | $\vdash$ |  |  |  |
|          | 84             | Н        |  |          |          | П        | -        |   | Т   |          |  |  |  |
|          | 85             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 86             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 87             |          |  |          |          |          |          |   |   |          |  |  |  |
|          | 88             |          | $ldsymbol{ld}}}}}}}}$ |          |          |          |          |   |   |          |  |  |  |
| $\vdash$ | 89             | _        |  |          | L_       | L_       |          | $ldsymbol{ld}}}}}}$ | $ldsymbol{ld}}}}}}$ | _        |  |  |  |
| ļ        | 90             |          | _  | _        | _        |          | _        | L_  |   |          |  |  |  |
| <u> </u> | 91             | $\vdash$ | _  | _        | <u> </u> |          |          | _   | ldash   | _        |  |  |  |
| -        | 92             | <u> </u> | <u> </u>   | <u> </u> | -        | -        | _        | $\vdash$  | H   | _        |  |  |  |
|          | 93<br>94       | -        | <u> </u>   | <u> </u> | $\vdash$ | $\vdash$ | _        | <u> </u>  |   | _        |  |  |  |
| $\vdash$ | 95             | -        | $\vdash$   | -        | $\vdash$ | $\vdash$ | -        | $\vdash$  | $\vdash$  |          |  |  |  |
|          | 96             | -        | -  | H        | -        | H        | -        | $\vdash$  | -   | _        |  |  |  |
|          | 97             | Н        | $\vdash$   | $\vdash$ |          | Н        |          | $\vdash$  | $\vdash$  | _        |  |  |  |
| $\vdash$ | 98             | _        |  | -        | $\vdash$ | _        |          | $\vdash$  | $\vdash$  | $\vdash$ |  |  |  |
|          | 99             |          |  |          |          |          |          |   |   | $\vdash$ |  |  |  |
|          | 100            |          |  |          |          |          | Т        |   |   |          |  |  |  |
|          |                | _        |  |          | _        | _        |          |   |   | _        |  |  |  |

| Cli   | aim               | Date   |              |          |          |          |          |          |          |                 |
|-------|-------------------|--|--------------|----------|----------|----------|----------|----------|----------|-----------------|
|       |                   |  |              |          |          |          |          |          |          | $\Box$          |
| Final | Original          |  |              |          |          |          |          |          |          |                 |
|       | 101               |  |              |          |          |          |          |          |          |                 |
|       | 102<br>103        |  |              |          |          |          |          |          |          |                 |
|       | 103               |  |              |          |          |          |          |          |          |                 |
|       | 104               |  |              |          |          |          |          |          |          | Ш               |
|       | 105               |  | <u> </u>     |          |          |          |          |          |          | Ш               |
|       | 106               | <u> </u>   | <u> </u>     | <u> </u> |          |          |          |          |          | Ш               |
|       | 107               | _  | <u> </u>     |          |          | _        | Н        |          | -        | Н               |
|       | 108<br>109        | -  | ⊢            | ┝        |          |          | -        |          |          | Н               |
|       | 110               | -  | ├            | -        |          | $\vdash$ | Н        |          |          | $\vdash$        |
|       | 111               | $\vdash$   | <del> </del> | -        |          | _        | Н        | $\vdash$ | $\vdash$ | Н               |
|       | 112               | $\vdash$   | H            | $\vdash$ |          | _        |          |          |          | Н               |
|       | 113               | <del>                                     </del> | Г            | $\vdash$ |          |          |          |          |          | Н               |
|       | 113<br>114        | <u> </u>   | l            |          |          |          |          |          |          |                 |
|       | 115               |  |              |          |          |          |          |          |          |                 |
|       | 116               |  |              |          |          |          |          |          |          |                 |
|       | 117               |  | L_           | L        |          |          |          | L        |          | $\Box$          |
|       | 118               | L  |              |          | L        | L.       | L        | L        | Ш        | Ш               |
|       | 119               | <u> </u>   | <u> </u>     | <u> </u> |          |          | _        |          |          | Ш               |
|       | 120               |  | <u> </u>     | _        |          | _        |          |          | _        | Н               |
|       | 121               | ┝  | ├            | ┝        | -        |          | -        | -        | -        | $\dashv$        |
|       | 121<br>122<br>123 | ├─   | ├            | ┝        |          |          |          | -        | H        | $\vdash$        |
|       | 124               | ├  | ┢─           | $\vdash$ |          |          | -        |          | <u> </u> |                 |
|       | 124<br>125        | _  | $\vdash$     |          |          |          |          |          |          | -               |
|       | 126<br>127<br>128 |  |              |          |          |          |          |          |          |                 |
|       | 127               |  |              |          |          |          |          |          |          |                 |
|       | 128               |  |              |          |          |          |          |          |          |                 |
|       | 129               |  | <u> </u>     | <u> </u> | !        |          |          | Ш        |          |                 |
|       | 130               | <u> </u>   | <u> </u>     | <u> </u> | _        |          |          | _        |          |                 |
|       | 131               | <u> </u>   | ┝            | _        |          |          |          | H        | H        | Н               |
|       | 132<br>133        | -  | ⊢            | <u> </u> | H        |          | -        | H        | H        | $\vdash$        |
|       | 134               | ┝  | $\vdash$     | ┝        | H        | -        | -        | $\vdash$ |          | $\vdash$        |
|       | 135               | ╁  | $\vdash$     | $\vdash$ | Н        | _        | -        | -        | Н        | $\vdash \vdash$ |
|       | 135<br>136        | T  | H            | $\vdash$ | Н        | -        | П        |          | Н        | Н               |
|       | 137               |  |              |          |          |          |          |          | П        |                 |
|       | 138               |  |              |          |          |          |          |          |          |                 |
|       | 139               |  |              |          |          |          |          |          |          |                 |
|       | 140               |  | <u> </u>     | L_       |          | L        |          |          |          | Ш               |
|       | 141               | $ldsymbol{ldsymbol{ldsymbol{eta}}}$              | L            | <u> </u> |          |          | L        | $\vdash$ | L        | Ш               |
|       | 142               | -  | <u> </u>     | <u> </u> | _        |          | _        | <u> </u> | H        | Ш               |
|       | 143               | $\vdash$   | <u> </u>     | $\vdash$ | $\vdash$ | <u> </u> | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash\dashv$  |
|       | 144<br>145        |  | -            | -        | -        |          | H        |          | H        | $\vdash$        |
|       | 146               | -  | <del> </del> | $\vdash$ | -        | -        | -        | -        | -        | Н               |
|       | 147               | $\vdash$   | $\vdash$     | $\vdash$ |          |          | $\vdash$ |          | $\vdash$ | Н               |
|       | 148               |  | Н            | $\vdash$ | $\vdash$ | $\vdash$ | П        | Т        |          | Н               |
|       | 149               |  |              | Г        |          |          |          |          |          | П               |
|       | 150               |  |              | $\vdash$ |          | $\vdash$ | $\vdash$ | Т        | $\Box$   | П               |